PURPOSE

To set a standardized procedure to ensure that employees are evaluated in a consistent and timely manner. .

POLICY

A. The treatment of Team Member exposure to bloodborne pathogens will proceed according to the OSHA Bloodborne Pathogens Standard, CFR 1910:1030 and the CDC Guideline (June 29, 2001): "Updated U.S. Public Health Services Guidelines for the Management of Occupational Exposures to HBV, HCV, and HIV and Recommendations for Post-Exposure Prophylaxis" and the CDC Guideline (September 30, 2005): "Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HIV and Recommendations for Post exposure Prophylaxis" and applicable state laws.

B. The facility will investigate any instance of reported health care worker exposure via mucous membrane or percutaneous exposures to blood, tissue or body fluids that are potentially infectious*; and will monitor for hepatitis B virus (HBV), hepatitis C virus (HCV) and/or HIV infection as appropriate.

1. Staff known to be HIV, HCV, or HBsAg positive shall practice careful hygiene technique at all times and wash hands before and after each patient contact. If asymptomatic, such individuals shall not be restricted from working in most areas of the hospital. Restrictions from working in areas where patient exposure to the Team Member's blood may occur, such as assisting in the operating room where hands may be placed into an open wound, will be enforced.
2. Therapy is to be determined by the facility's designated healthcare provider using the Post-Exposure Hot-Line Resource 1-888-448-4911. Do not give any prophylactic medications without consulting this hot-line.

PROCEDURE

A. **Perform First Aid:**

1. Team Members are instructed to follow the following steps in the case of an exposure to blood or body fluids:
   - For a blood or body fluid splash into the eyes or onto mucous membranes:
     - With assistance as needed, flood the area well with water.
     - In the event of an eye exposure while wearing contact lenses, remove the lenses immediately.
2. After a needlestick or other sharps injury or exposure to non-intact skin:
   - Wash the area well with soap and water. DO NOT use bleach on the skin.

B. **Seek Medical Treatment Immediately**

1. The Team Member's supervisor or Resource Nurse is to be notified immediately of the injury in order to relieve the Team Member to seek treatment.
   - Complete an Occupational Injury/Illness/Exposure Report form.
   - Call the Resource Nurse, obtain a post-exposure pack from Lab obtain forms, and report to the Emergency Room for treatment/referral.
2. In addition to blood and body fluids containing visible blood, semen and vaginal secretions are also considered potentially infectious. The following fluids are also considered potentially infectious: cerebrospinal fluid, synovial fluid, pleural fluid, peritoneal fluid, and amniotic fluid. The risk of transmission for HBV, HCV, and HIV infection from these fluids is unknown; the potential risk to health care providers from occupational exposures has not been assessed by epidemiological studies in healthcare settings. Feces, nasal secretions, saliva, sputum, sweat, tears, urine, and vomitus are not considered potentially infectious unless they contain blood. The risk of transmission of HBV, HCV, and HIV infection from these fluids is extremely low.
3. Post-Exposure counseling will be made available through the Employee Health Nurse utilizing CDC's "Exposure to Blood- What Healthcare Personnel Need to Know" Handout.

C. **Source Testing**

1. Identify and inform the source patient of the incident.
2. Obtain consent for HIV testing of the patient's blood for HIV and for release of results to the Employee Health Coordinator.
3. The source patient shall also be tested for hepatitis B surface antigen (HbsAg), and hepatitis C antibody, unless already known to be positive.
4. The source patient will be tested for HIV antibody utilizing the "Rapid Test". If the patient or legal representative is unable to consent, the "Conditions of Admission" should be used according to State regulations.

D. **Team Member Evaluation and Treatment:**

1. Evaluate the exposure for the following:
   - Details of the procedure being performed, including where and how the exposure occurred.
   - If related to a sharp device, the type and brand of device and how and when in the course of handling the device the exposure occurred.
   - If gloves were being worn.
2. Obtain two red-topped tubes to for the "Post-Exposure Profile, Employee" (Hepatitis B surface antibody, HCV, and HIV).
3. If Team Member's results are deemed positive, Team Member will be referred to their personal physician for continued treatment and follow-up.

E. **Hepatitis B Exposure Management:**

1. Review the hepatitis B vaccination status and the vaccine-response status (if known) of the exposed person.
2. Review the following summary of the prophylaxis recommendations for the percutaneous or mucosal exposure to blood according to the Hepatitis B surface antigen (HBSAG HBsAg) status of the exposure source and the vaccination and vaccine-response status of the exposed person.
3. When Hepatitis B Immune Globulin (HBIg) is indicated, it should be administered as soon as possible after the exposure (preferably within 24 hours). The effectiveness of HBIg when administered more than seven days after exposure is unknown.
4. When hepatitis B vaccine is also indicated, it should also be administered as soon as possible (preferably within 24 hours) and can be administered simultaneously with HBIg at a separate site (vaccine should always be administered in the deltoid muscle).
5. For exposed persons who are in the process of belong vaccinated but have not completed the vaccination series, vaccination should be completed as scheduled, and HBIg should be added as indicated.

Vaccination and antibody response status of exposed workers*	Treatment		
	Source HbsAg†-positive	**Source HbsAg-††negative**	**Source not tested or unknown**
Unvaccinated	HBIG‡ x 1 and initiate HB vaccine series ¶	Initiate HB vaccine series¶	Initiate HB vaccine¶
Previously vaccinated			
Known responder**	No treatment	No treatment	No treatment
Known nonresponder §	HBIG x 1 and reinitiate vaccination or HBIG x 2 §§	No treatment	If known high-risk source, treat as if source were HbsAG-positive
Antibody response unknown	Test exposed for anti-HBs¶¶ 1. If inadequate,§ HBIG x 1 plus HB vaccine booster dose 2. If adequate, no treatment	No treatment	Test exposed for anti-HBs 1. If inadequate,§ HB vaccine booster dose and recheck titer in 1-2 months 2. If adequate, no treatment

* Persons who have previously been infected with HBV are immune to re-infection and do not require postexposure prophylaxis.
† Hepatitis B surface antigen.
‡ Hepatitis B immune globulin; dose is 0.06 ml/kg intramuscularly.
¶ Hepatitis B vaccine.
** A responder is a person with adequate levels of serum antibody to HbsAG (i.e., anti-HBs $\geq$ 10 mIU/mL).
§ A nonresponder is a person with inadequate response to vaccination (i.e., serum anti-HBs < 10 mIU/mL).
§§ The option of giving one dose of HBIG and reinitiating the vaccine series is preferred for nonresponders who have not completed a second3-dose series. For persons who previously completed a second vaccine series but failed to respond, two doses of HBIG are preferred.
¶¶ antibody to HbsAg.
*Source: *Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HBV, HCV, and HIV and Recommendations for Postexposure Prophylaxis,* June 29, 2001.

F. **Hepatitis C Exposure Follow-Up:**

1. Test source for hepatitis C antibody. If positive, the Team Member is tested for antibody and ALT at 3 months baseline and 6 months post-exposure; if negative no further test is necessary. No postexposure prophylaxis is available or recommended. Do a HCV DNA PCR 6 weeks post-exposure if symptoms of hepatitis develop. If the Team Member is antibody positive on subsequent testing, refer the Team Member to their private physician for follow-up.
2. Staff known to be HIV, HCV, or HBsAg positive shall practice careful hygiene technique at all times and wash hands before and after each patient contact. If asymptomatic, such individuals shall not be restricted from working in most areas of the hospital. Restrictions from working in areas where patient exposure to the Team Member's blood may occur, such as assisting in the operating room where hands may be placed into an open wound, will be enforced.

G. **Management of Exposures to HIV**

1. If the source patient has AIDS, is positive for HIV antibody, or refuses the test:
   - Counsel the health care worker regarding risks of infection. (He/she should be advised to report and seek medical evaluation for any acute febrile illness, particularly one characterized by fever, rash, or lymphadenopathy that occurs within 12 weeks after exposure.)
   - Counsel the Team Member regarding the risks and benefits of prophylactic therapy. Therapy to be determined by the facilities designated healthcare provider using the Post-Exposure Hot-Line Resource 1-888-448-4911. Do not give prophylactic medications without consulting this hot-line.
   - If the health care worker's baseline HIV antibody blood test is negative, and the source patient tests positive, the Team Member will be tested for HIV antibody at 6 weeks, 3 months, and 6 months. Also check CBC, renal function, and hepatic function at 2 weeks and 4 weeks post-exposure. If the Team Member tests positive for HIV post-exposure, a referral will be made to the Team Member's physician for treatment.
   - The health care worker will be counseled on U.S. Public Health Service recommendation for preventing transmission of HIV during the 6 months after exposure. Evidence of counseling will be documented in the health care worker's employee health record.

2. If the source patient tests negative, no further testing of the Team Member is indicated, unless there is suspicion, because of the source patient's risk factors, that the source may be in the "window period" for developing HIV antibody. In this case, post-exposure testing will continue as in above.
3. If the source patient cannot be identified, decisions regarding appropriate follow-up should be determined on a case-by-case basis.

Post-Exposure Questionnaire
Complete and Provide to ED Physician

Name of Team Member _____Team Member ID Number_____

Assigned Injury ID#_____ Team Member Department_____

Date of Injury_____Time of Injury _____Completed by_____Date_____

Location of Injury/Exposure (Check all that apply)

- □ Finger
- □ Hand □ L □ R
- □ Arm □ L □ R
- □ Face or Head
- □ Torso
- □ Leg □ L □ R
- □ Eye □ Mouth
- □ Other: _____

_____

Sharp Involved (If Known)

Type: _____
Brand: _____
Model: _____
Needle Gauge:_____
Body Fluid Involved: _____
_____
_____
_____
_____

(Employee Health/ER Staff)

Did the sharp involved have engineered injury protection(s)?

□ Yes □ No □ Don't Know

Was the protective mechanism activated?

□ Yes □ No □ Don't Know

When did the injury occur?

- □ Before activation
- □ During activation
- □ After activation
- □ Don't Know

Job Classification

- □ Doctor
- □ Nurse
- □ Intern/Resident
- □ Pt. Care Support Staff
- □ Tech □ OR □ RT □ Radiology
- □ Phlebotomist/Lab Tech
- □ Housekeeper
- □ Trainee: _____
- □ Other: _____

Location and Department

- □ Patient Room
- □ ICU/CCU
- □ Outside Patient Room
- □ Emergency Department
- □ Operating Room/PACU
- □ Cath Lab
- □ Laboratory
- □ Utility Area
- □ Other: _____

_____

Procedure

- □ Draw venous blood
- □ Draw arterial blood
- □ Injection
- □ Start IV/Central line
- □ Heparin/Saline flush
- □ Obtaining tissue sample
- □ Cutting
- □ Suturing
- □ Other: _____

_____

Describe in detail how the exposure incident occurred:

The procedure being performed:_____

The device being used: _____

Depth of injury:_____

Personal protective equipment worn: _____

The body part affected: _____

Type of body fluid: _____

Duration of contact with the fluid prior to first aid:_____

Source patient: □ Known or □ Unknown

Were engineering and work practice controls in place and in use @ time of incident?

How could this incident been avoided?

_____

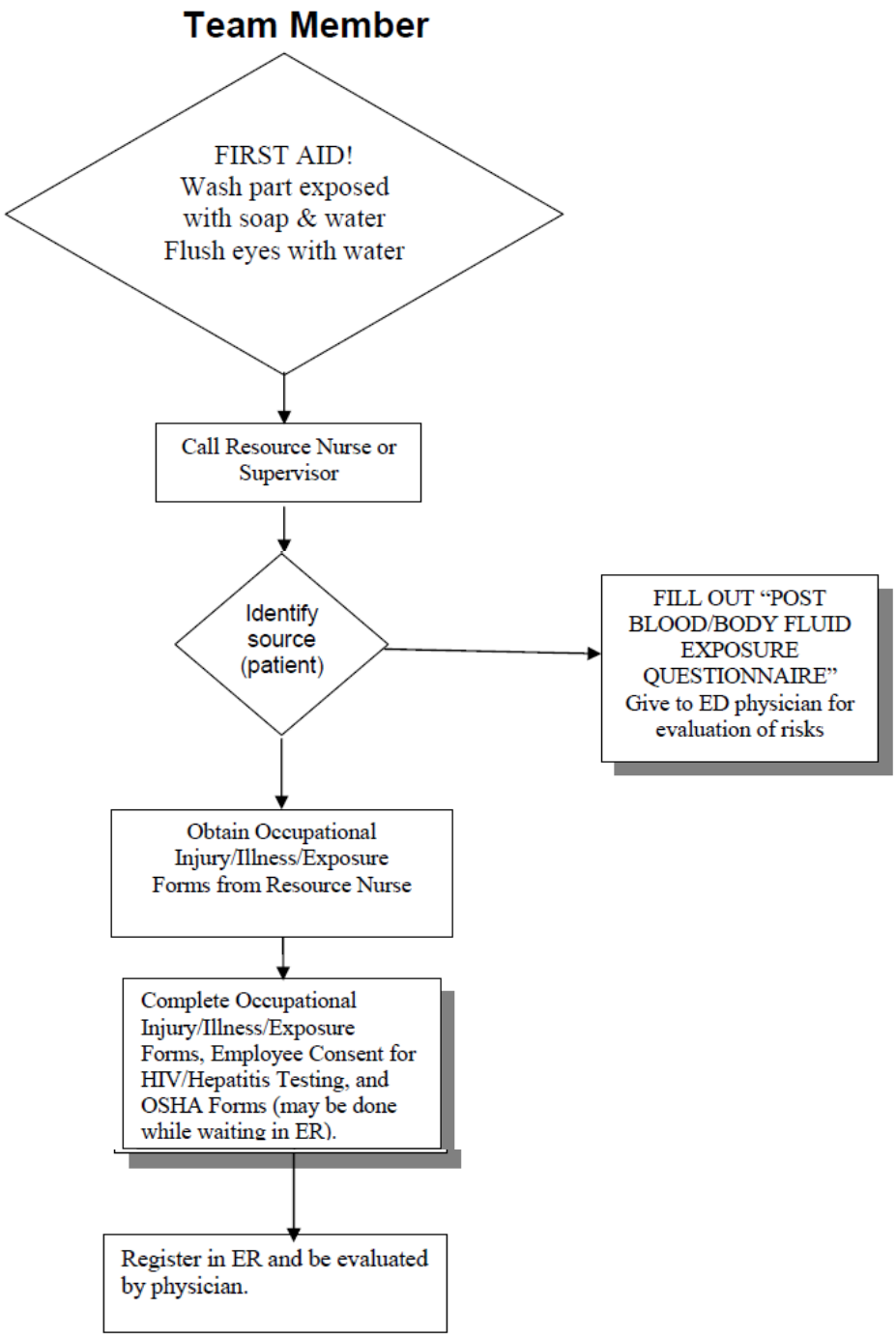
_____

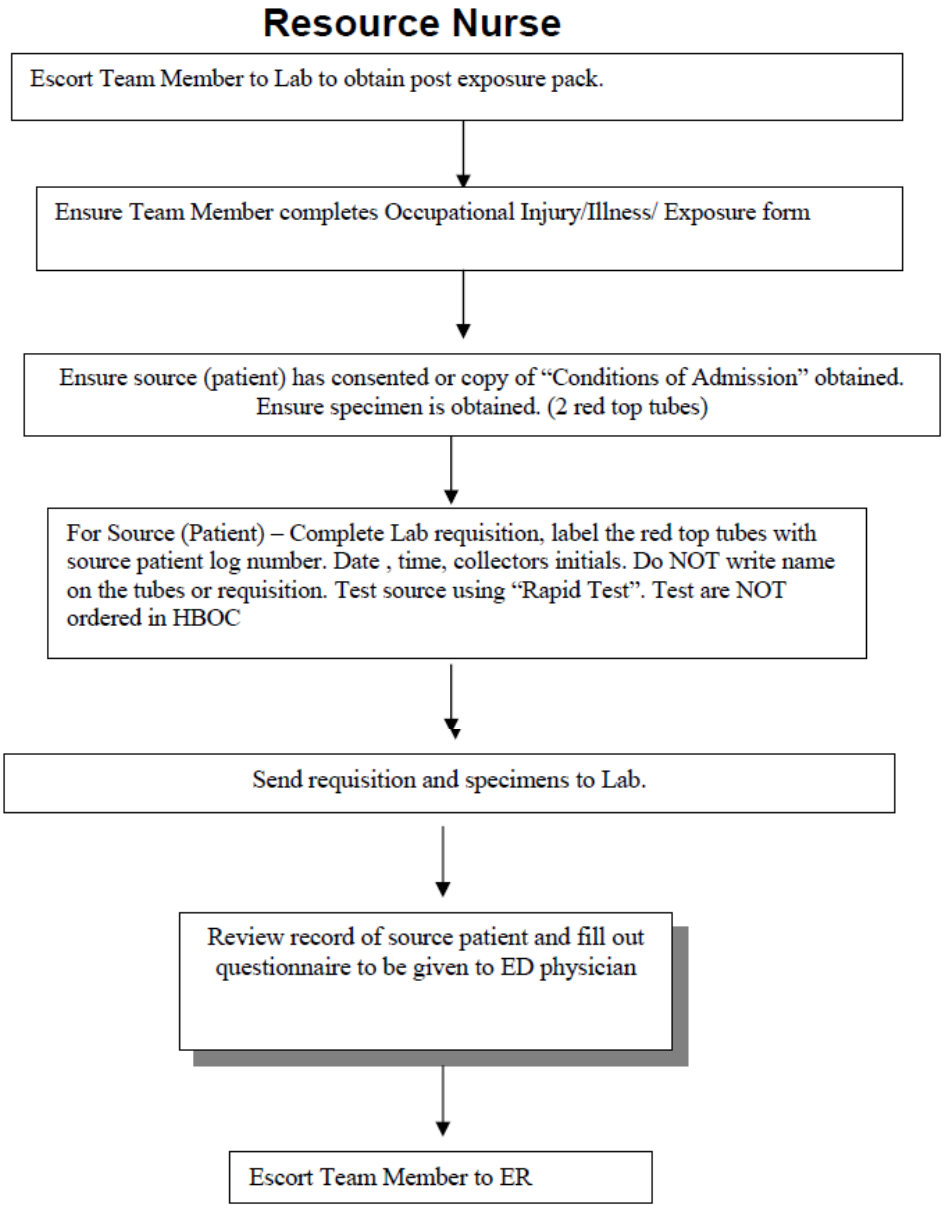
What changes were implemented to prevent similar incidents?

_____

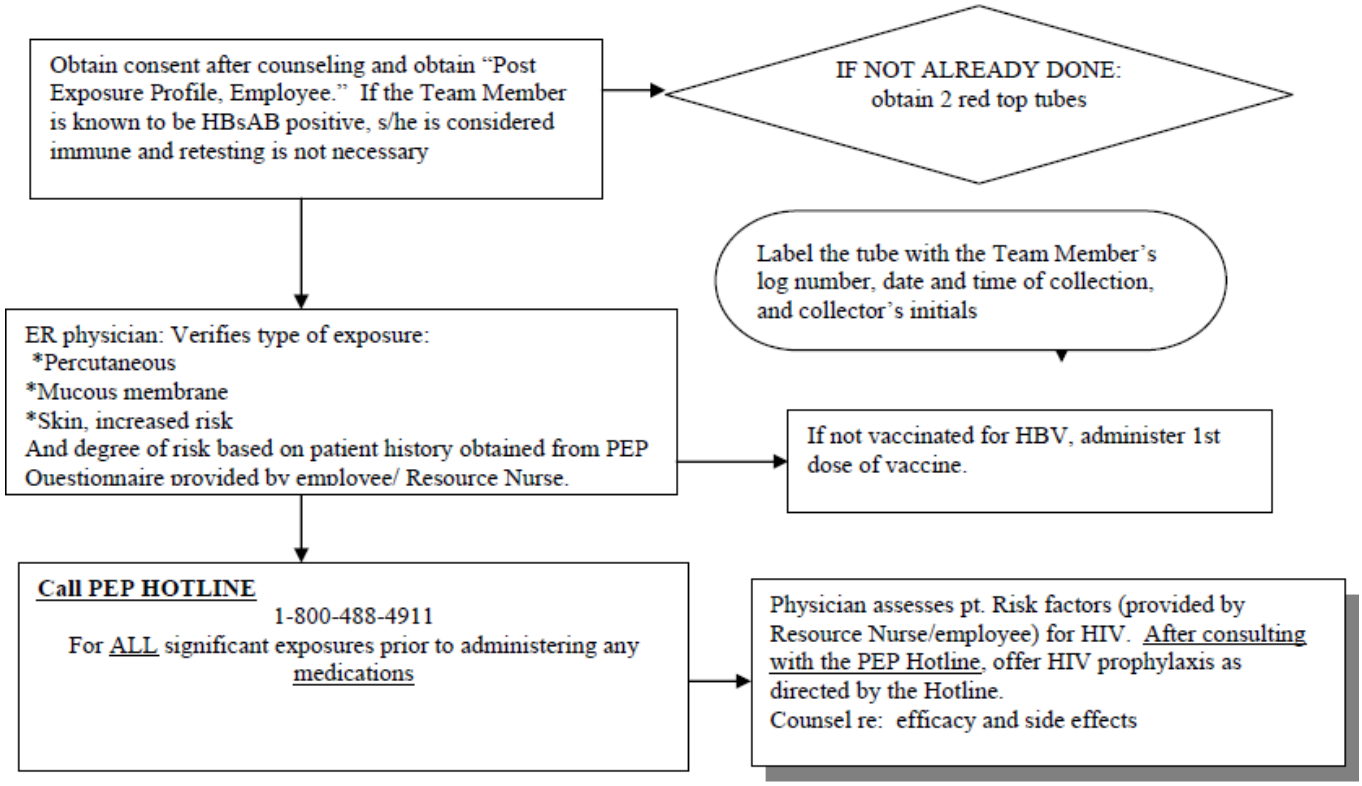
Was PEP hotline notified? Yes/ No Date/Time _____ Recommendations:

_____


Team Member
FIRST AID!
Wash part exposed with soap & water
Flush eyes with water
Call Resource Nurse or Supervisor
Identify source (patient)
FILL OUT "POST BLOOD/BODY FLUID EXPOSURE QUESTIONNAIRE"
Give to ED physician for evaluation of risks
Obtain Occupational Injury/Illness/Exposure Forms from Resource Nurse
Complete Occupational Injury/Illness/Exposure Forms, Employee Consent for HIV/Hepatitis Testing, and OSHA Forms (may be done while waiting in ER).
Register in ER and be evaluated by physician.


Resource Nurse
Escort Team Member to Lab to obtain post exposure pack.
Ensure Team Member completes Occupational Injury/Illness/ Exposure form
Ensure source (patient) has consented or copy of "Conditions of Admission" obtained. Ensure specimen is obtained. (2 red top tubes)
For Source (Patient) – Complete Lab requisition, label the red top tubes with source patient log number. Date , time, collectors initials. Do NOT write name on the tubes or requisition. Test source using "Rapid Test". Test are NOT ordered in HBOC
Send requisition and specimens to Lab.
Review record of source patient and fill out questionnaire to be given to ED physician
Escort Team Member to ER

Emergency Department



Completed forms and consents are placed in Employee Health mailbox.

Nurse documents "Post-exposure profile specimen obtained" in Nurses' Notes.

Discharge Team Member (return to work). Leave completed post-exposure pack in Employee Health mailbox. Instruct Team Member to follow-up with Employee Health.

Employee Health